

Fig. 1

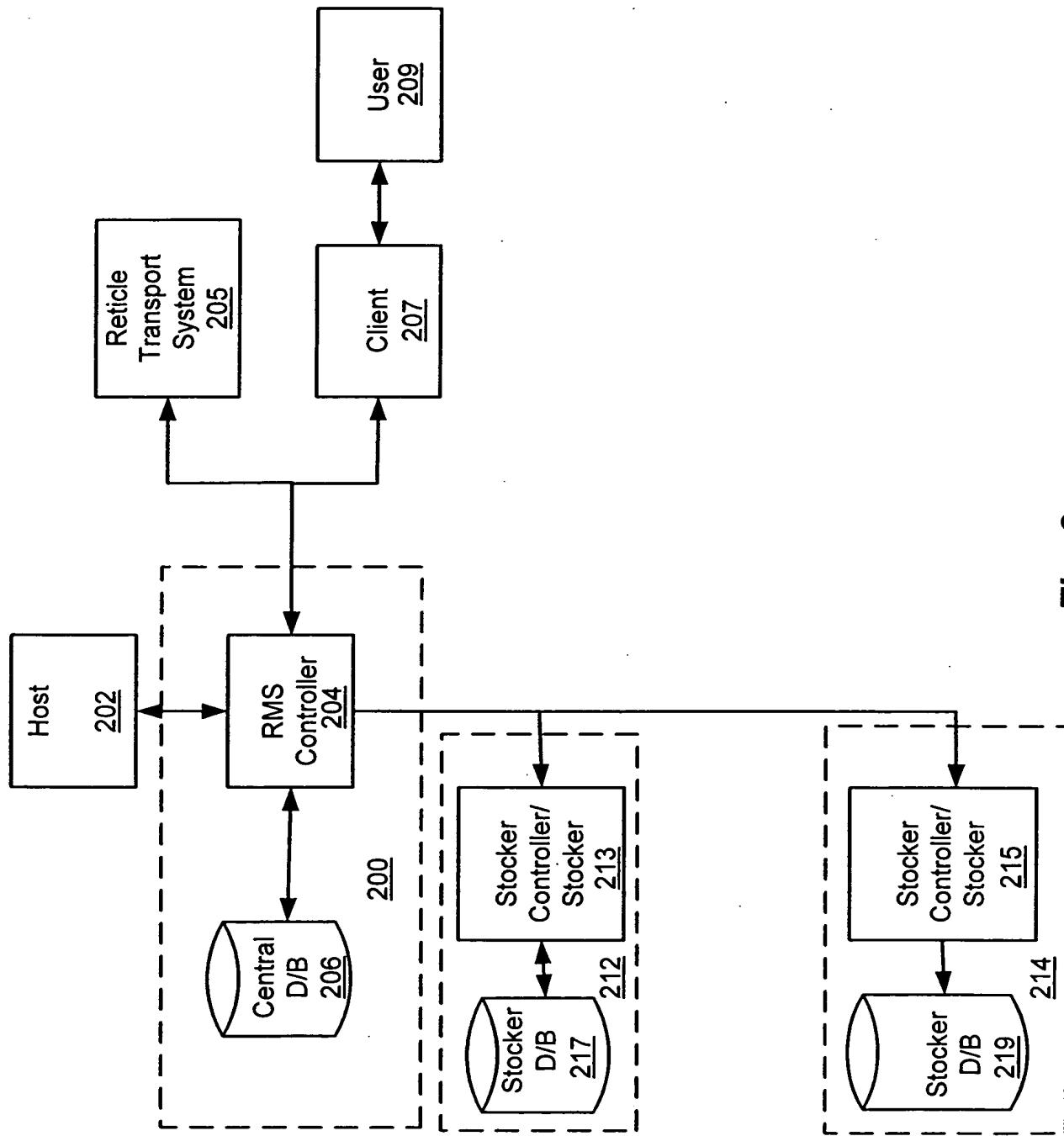


Fig. 2

| Attribute Name | Attribute Type | Attribute Definition |
|-----------------------|--------------------------------------|---|
| Reticle ID | Character string (255-char. max.) | <u>Primary key</u> . Identity of the reticle. Must be unique. Empty Reticle carriers are assigned unique Reticle ID by the system. |
| Reticle carrier ID | Character string (255-char. max.) | <u>Secondary Key</u> . Identity of the reticle carrier within which the reticle is now housed. It is blank if not kitted, can contain duplicates for the case of multiple Reticles per reticle carrier. |
| Times Retrieved | 32-bit unsigned Long | Number of times reticle has been retrieved. |
| Date Last Retrieved | Date/time | Date and time this reticle was last retrieved. |
| Last Retrieve User ID | Character string (255-char. max.) | User name of the operator who last selected this reticle for retrieve. |
| Times Stored | 32-bit unsigned Long | Number of time the reticle has been stored |
| Date Last Stored | Date/time | Date and time the reticle was last stored for use. |
| Last Stored User ID. | Character string (255-char. max.) | User name of the operator who last stored this reticle after it was used (not cleaned or inspected). |
| Times Cleaned | 32-bit unsigned Long | Number of times this reticle has been cleaned |
| Date Last Cleaned | Date/time | Date and time the reticle was last stored after being cleaned. |
| Last Cleaned User ID | Character string | User name of the operator who last stored |

306

311

Fig. 3A

306 (cont)

| | | |
|-------------------------|--------------------------------------|--|
| | (255-char. max.) | this reticle after being cleaned. |
| Cleaned By | Character string (255-char. max.) | Identity of reticle cleaner. |
| Location Cleaned | Character string (255-char. max.) | Identity of location where reticle was last cleaned. |
| Times Inspected | 32-bit unsigned Long | Number of times this reticle has been inspected. |
| Date Last Inspected | Date/time | Date and time this reticle was last stored after being inspected. |
| Last Inspected User ID | Character string (255-char. max.) | User name of the operator who last stored the reticle after being inspected. |
| Inspected By | Character string (255-char. max.) | Identity of reticle inspector. |
| Location Inspected | Character string (255-char. max.) | Identity of location where reticle was last inspected. |
| Last Kit Time | Date/time | Date and time when this reticle was kited. |
| As Reticle carrier Time | Delta time | Cumulative time this reticle has spent in a reticle carrier. This is independent of the reticle carrier. Only updated upon an un-kitting transformation. |
| Last Un-Kit Time | Date/time | Date and time when this reticle was un-kitted. |
| As Bare Time | Delta time | Cumulative time this reticle has spent in a bare reticle Stocker. This is independent of the Stocker. Only updated upon a kit transformation. |
| Date Entered | Date/time | Date and time this reticle was first entered into the system. |
| Creator User ID | Character string (255-char. max.) | User name of the person who created the reticle. Assigned when Reticle created. |
| Keep Kitted | Boolean | True/False indication of whether the reticle is to stay in the reticle carrier independent of automatic aging. |
| Current Location | Character string (255-char. max.) | Current location of reticle. |
| Last Location | Character string (255-char. max.) | Previous location of reticle. |

312

Fig 3B

306 (cont)

| | | | |
|-------------------------|-----------------------------------|--|-----|
| Last Reticle Repair | Date/time | Date and time the reticle was last repaired. | 316 |
| Repair Count | 32-bit unsigned Long | Number of times the reticle has been repaired. | |
| Last Re-pelliclization | Date/time | Date and time the reticle was last re-pellicled. | 318 |
| Re-pelliclization Count | 32-bit unsigned Long | Number of time the reticle has been re-pelliclized. | |
| Hold Time | Date/time | Date and time the reticle was put on hold. This is blank when not on hold. | 320 |
| Hold User ID | Character string (255-char. max.) | User name of the person who issued the hold. | |

Fig 3c

308
1

| Attribute Name | Attribute Type | Attribute Definition |
|--|--|---|
| Transport Name | Character string (255-char. max.) | <u>Primary Key</u> . Customer designation given to each Stocker or Aerotrax. Must be unique. |
| Transport Type | Enum (reticle, reticle carrier, Aerotrax) | Definition of what type of transport. |
| Transport Capacity | 32-bit unsigned Long | Number of locations within the Stocker. Not valid for Aerotrax |
| Transport Capacity High Water Count | 32-bit unsigned Long | Number of shelves allowed to keep full within a transport. Not valid for Aerotrax. |
| Empty Reticle carrier Count | 32-bit unsigned Long | Number of empty reticle carriers contained with in this Stocker. Only valid for reticle carrier Stockers. |
| Empty Reticle carrier High water Count | 32-bit unsigned Long | Value set to determine highest number of empties allowed in system. Used in aging and empty management. Only valid for Reticle carrier Stockers |
| Empty Reticle carrier Low water Count | 32-bit unsigned Long | Value set to determine the lowest number of empties allowed in system. Used in aging and empty management. Only valid for Reticle carrier Stockers. |
| Port Name List | Character string (255-char. max.) | Semicolon delimited list of the port names reachable by this Stocker. |
| Port Type List | Enum list (reticle, reticle carrier, Aerotrax) | List of enumerated type indicating the type of port specified in the name list. |
| Age Interval | Delta time | Amount of time this transport uses the determine reticle carrier usage aging. |
| Age Tier Level | 32-bit unsigned Long | Used to determine tiering of system. Gives an indication of ranking of this transport in relation to others. |

F5 3D

| Attribute Name | Attribute Time | Attribute Definition |
|--------------------------------------|-------------------------|--|
| Inspection Max | 32-bit unsigned Long | Maximum number of times a reticle is allowed to be inspected. |
| Inspection Bare Interval | Delta time | Amount of time a reticle is allowed to be bare between inspections. |
| Inspection Reticle carrier Interval | Delta time | Amount of time a reticle is allowed to be kitted between inspections. |
| Uses between inspections | 32-bit unsigned Long | Number of uses allowed between inspections. |
| Clean Max | 32-bit unsigned Long | Maximum number of times a reticle is allowed to be cleaned. |
| Clean Bare Interval | Delta time | Amount of time a reticle is allowed to be bare between cleanings. |
| Clean Reticle carrier Interval | Delta time | Amount of time a reticle is allowed to be kitted between cleanings. |
| Uses between cleanings. | 32-bit unsigned Long | Number of uses allowed between cleanings. |
| Reticle carrier Aging check interval | Delta time | Time between checks are made to determine reticle carrier age and possible tier degradation. |

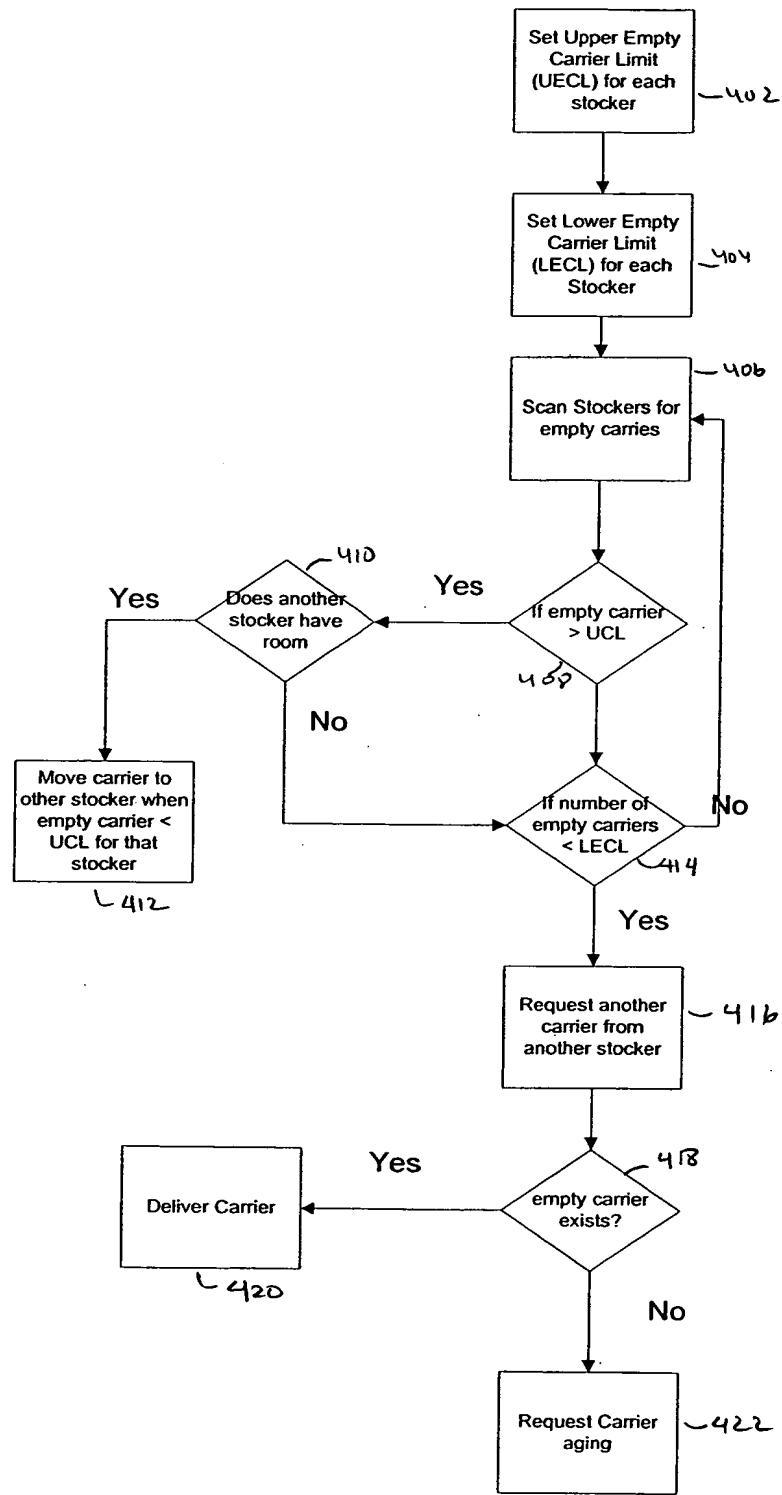


Fig. 4

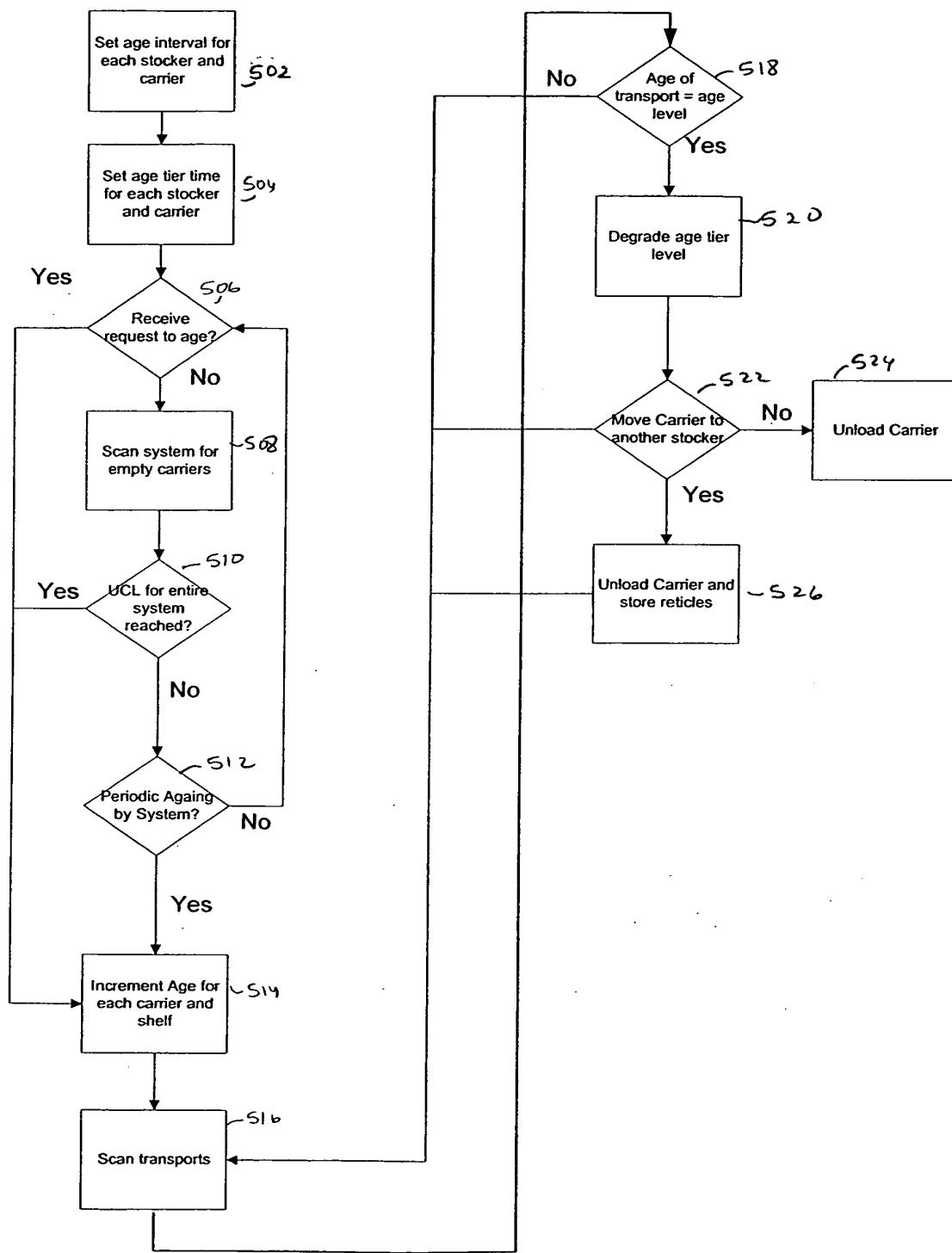


Fig. 5

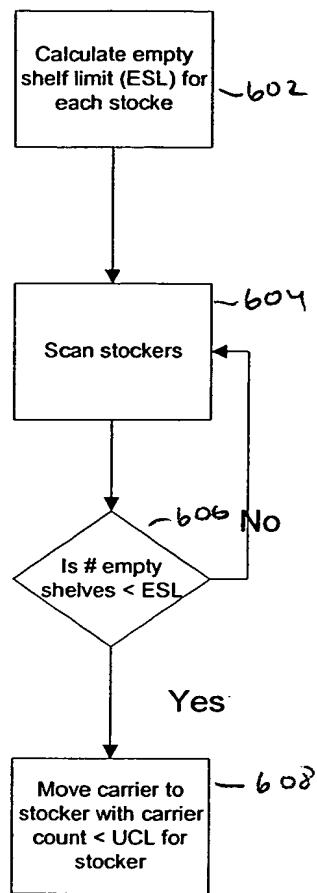


Fig. 6